

SOLUTION

Video Center on AWS

rivetlogic



Does your organization deliver video at scale? Do you stream live or recorded updates from company leadership? Are you part of an enterprise that provides e-learning assets? If so, the shifting video landscape will change the way you create and deliver video.

A Shifting Video Landscape

Video is deeply embedded in today's connected experience. As video has become more and more prevalent, viewers' expectations around its accessibility, quality and relevance have increased. Audiences now expect to watch the content they want, when they want, on the device they choose, with the best possible picture quality. In addition, viewers increasingly anticipate that the content they engage with will be appropriately tailored to their particular needs, interests or tastes.

However, traditional approaches to video processing and delivery can't keep pace with the changing nature of video consumption and the rising expectations that follow from it.

Conventional video technologies fall short because they:

- Are capital intensive
- Require complex resource planning
- Require continuous upgrades
- Require significant operational expense
- Are slow to address new and emerging standards

Benefits of Moving Video Operations to the Cloud

Organizations who choose to migrate their streaming video infrastructure to a cloud-based architecture can tap into a number of opportunities to improve the performance, efficiency and costs of their video workflows.

- Ease of use
- Broadcast-grade capabilities
- Pay-as-you-go utility
- Automated, limitless scalability
- Flexible workflow options
- Built-in reliability
- Operational agility
- New paths to monetization
- Focus on what matters

Case Study: Executive Office for United States Attorneys (USAO)

NEED

- Training video content management systems
- Targeted video format for Bring Your Own Device (BYOD) delivery
- Highly secure, robust, cost effective 24x7 streaming and downloading
- Branded, consumer-oriented web interface
- Government-approved private cloud hosting

SOLUTION

- Deployed Video Center on AWS in private AWS FedRamp Cloud
- Leveraged Amazon EC2, Elastic Transcoder, S3 and CloudFront
- Integrated with USAO Single Sign-On (SSO)

INTRODUCING VIDEO CENTER ON AWS

Whether your business uses video for corporate communications, training, or entertainment, you need the ability to provide your users with easy online access to your highly secure video content anytime, anywhere, on any device. Secure video content must be delivered wherever it is needed, including remote and 'disconnected' environments. Furthermore, content security must be tailored based on roles, missions and other significant factors.

Video Center on AWS is designed to help organizations meet these needs, enabling a BYOD model for training, education and entertainment video consumption in secure, highly-distributed – and even disconnected – environments.

The Video Center solution is built using the award-winning **Crafter CMS** platform and leverages **AWS Elemental Media Services** such as **MediaConvert** as well as several AWS services including **Elastic Compute Cloud (EC2)**, **Simple CloudStorage Service (S3)**, and **CloudFront**.

HOW IT WORKS

Video Center App *End User Experience*

The Video Center Application provides secure, easy-to-use consumer-like interfaces such as a "YouTube-like" experience where end users may browse, search, discover and play videos on any device. The experience is mobile-friendly and personalized to the end user. Each user's device type is detected in real time and the proper video codec streamed for the user's device and bandwidth. The Video Center Application is built on top of the elastically-scalable Crafter Engine and leverages S3 for storage and CloudFront as a CDN.

Video Center CMS *Video Management Interface*

The Video Center CMS provides a user-friendly interface for content editors and video managers to create and optimize the overall end-user experience of the Video Center App, including the ability to upload and assign metadata to videos. Video files are transcoded using AWS Elemental MediaConvert and then stored in S3, while video metadata is stored in the Crafter CMS along with all other Video Center App content.

An in-context preview capability allows content editors to visualize and test changes prior to publishing updates to the Video Center App live site. All standard enterprise CMS functionality is available and may be leveraged as needed, including versioning, workflow, content modeling, auditing and single sign-on integration.

SOLUTION BENEFITS

Video Center on AWS provides modern, consumer-like user interfaces for training, internal communications and entertainment, supporting content delivery to both remote and disconnected locations. The solution securely serves video anywhere to any device with role-based permissions, dynamically transcoding for specific devices and bitrates as needed and integrating with strong authentication and authorization. Video Center on AWS personalizes targeted content and video based on role, region, rank, mission and other factors, easily scaling due to AWS' elastic infrastructure.

COMMON USE CASES

- **Training** - Personalized training and education video delivery
- **Corporate Communications** - Organization-wide, secure communication and news
- **Entertainment** - Movies and entertainment for remote locations and even those disconnected from a network

DISCONNECTED CONTENT DELIVERY WORKFLOW

In addition to running in the cloud, AWS Video Center also runs on hardened, physical servers that combine compute, storage and other AWS capabilities to provide fully disconnected content delivery of secure video content to deployed units anywhere in the world that their mission takes them.

